

Amendments to the Claims:

This listing of claims will replace all prior versions and listings of claims in the instant application:

Listing of Claims:

1. (Currently Amended) An integrated circuit, comprising:

at least one DC to DC converter including structure for receiving a single DC supply voltage and structure for producing a plurality of output DC supply voltages at a greater voltage level than said received DC supply voltage; and

processing circuitry having structure for receiving at least one of said produced ~~plurality of DC output~~ supply voltages as its supply voltage and at least one time-varying data input signal, said processing circuitry modifying ~~[[a]]~~ at least one parameter of said time-varying signal to produce at least one modified time-varying output data signal, wherein an output voltage level of ~~each of~~ said at least one modified output signal is scaled to an output voltage level of said at least one of said produced DC ~~a received one of said plurality of output~~ supply voltages received by said processing circuitry.
2. (Currently Amended) The integrated circuit of claim 1, wherein said time-varying input signal comprises an RF signal ~~[[,]]~~ or a microwave ~~or a digital~~ signal.

3. (Currently Amended) The integrated circuit of claim 1, wherein said at least one parameter is selected from the group consisting of a voltage level, a polarity, and a frequency.

4. (Previously Presented) The integrated circuit of claim 1, wherein said DC to DC converter includes structure for receiving opposite phase clock signals, said clock signals toggling between said supply voltage and ground.

5. (Original) The integrated circuit of claim 1, wherein said processing circuitry comprises digital circuitry.

6. (Original) The integrated circuit of claim 1, wherein said processing circuitry comprises analog circuitry.

7. (Original) The integrated circuit of claim 1, wherein said processing circuitry comprises analog and digital circuitry.

8. (Original) The integrated circuit of claim 1, wherein said time-varying input signal is a digital signal.

9. (Original) The integrated circuit of claim 1, wherein said time-varying input signal is an analog signal.

10. (Original) The integrated circuit of claim 1, wherein said parameter of said time-varying signal that is modified by said processing circuitry is programmable.

11. (Original) The integrated circuit of claim 1, wherein said processing circuitry comprises an input buffer and an output buffer.

12. (Previously Presented) The integrated circuit of claim 1, further comprising at least one passive element for providing programmability to said at least one of said plurality of output supply voltages.

13. (Original) The integrated circuit of claim 12, wherein said at least one passive element is a peripheral passive element.

14. (Original) The integrated circuit of claim 1, wherein said DC to DC converter is switched capacitor based.

15-16. Cancelled

17. (Currently Amended) A circuit board, comprising:

a plurality of integrated circuits disposed on said board, said plurality of integrated circuits collectively requiring a plurality of different DC supply voltage levels and a plurality of different time-varying data signals at respective inputs for operation; and

~~[[an]]~~ a power supply integrated power-supply circuit (IC) disposed on said board and coupled to said plurality of integrated circuits, said power supply IC operable to provide said required voltage levels and said required time-varying signals at said respective inputs, said integrated power supply IC circuit comprising:

at least one DC to DC converter including structure for receiving a single DC supply voltage and structure for producing at least ~~[[a]]~~ said plurality of ~~output~~ required DC supply voltages, said produced DC supply voltages being at a greater voltage level than said received DC supply voltage, more than one of said plurality of output supply voltages coupled to said plurality of integrated circuits, and;

processing circuitry having structure for receiving at least one of said produced DC plurality of output supply voltages as its supply voltage and at least one time-varying data input signal, said processing circuit modifying ~~[[a]]~~ at least one parameter of said time-varying signal to produce at least one ~~modified~~ of said required time-varying output signals, ~~said at least one modified time-varying output signal of said processing circuit being coupled to said inputs of said plurality of integrated circuits, wherein [[an]] output voltage level of said at least one modified output~~ of said produced time-varying output

signals is scaled to an output voltage level of said at least one of said ~~plurality of output~~
produced DC supply voltages received by said processing circuitry.

18. (Currently Amended) The circuit board of claim 17, wherein said
time-varying input signal comprises an RF signal or a ~~[[,]]~~ microwave ~~or a digital~~ signal.

19. (Currently Amended) The circuit board of claim 17, wherein said at
least one parameter is selected from the group consisting of a voltage level, a polarity,
and a frequency.

20. (Previously Presented) The circuit board of claim 17, wherein said DC to
DC converter includes structure for receiving opposite phase clock signals, said clock
signals toggling between said supply voltage and ground.

21. (Original) The circuit board of claim 17, wherein said processing
circuitry comprises digital circuitry.

22. (Original) The circuit board of claim 17, wherein said processing
circuitry comprises analog circuitry.

23. (Original) The circuit board of claim 17, wherein said processing circuitry comprises analog and digital circuitry.

24. (Original) The circuit board of claim 17, wherein said time-varying input signal is a digital signal.

25. (Original) The circuit board of claim 17, wherein said time-varying input signal is an analog signal.

26. (Original) The circuit board of claim 17, wherein said parameter of said time-varying signal that is modified by said processing circuitry is programmable.

27. (Original) The circuit board of claim 17, wherein said processing circuitry comprises an input buffer and an output buffer.

28-29. Cancelled

30. (Original) The circuit board of claim 17, wherein said DC to DC converter is switched capacitor based.

31. Cancelled